A NOTE ON ELLIPSIS-RESISTANT CONSTITUENTS *

Satoshi Oku Hokkaido University

1. Introduction

Otani and Whitman (1991) propose that the sloppy identity reading observed in Japanese null object sentences is derived by V-stranding VP-ellipsis. For instance, having (1a) as the antecedent clause, [e] in (1b) can be interpreted as "Mary's letters":

- (1) a. John-wa [zibun-no tegami-o] sute-ta. John-NOM self-of letter-ACC discard-PERF
 'John_i threw out self_i's letters.'
 b. Mary-mo [e] sute-ta
 - Mary-also discard-PERF

'Mary_j also threw out self_j's letters.' (Otani and Whitman 1991, 346-347)¹

Otani and Whitman argue that to obtain the relevant sloppy identity reading, V moves out of VP and the VP containing the object NP alone is copied onto [e]. As a result, (1b) behaves in the same way as English VP ellipsis sentences such as *John threw out his letters, and Mary did* [$_{VP}$ e], too, where [$_{VP}$ e] can be interpreted as [$_{VP}$ throw out Mary's letters], the sloppy identity reading.

One of the empirical arguments against this analysis (Oku 1998, Takahashi 2008a, among others) is that when the sentence contains a VP-related adjunct such as a manner adverb, ellipsis does not behave in the same fashion as genuine VP-ellipsis observed in English. Let us look at (2).

^{*} Parts of the material in this work were presented at 31st General Meeting of English Linguistic Society of Japan (Fukuoka University, November 9, 2013), 86th General Meeting of English Literature Society of Japan (Hokkaido University, May 24, 2014), Comparative Syntax and Language Acquisition #5 (Center for Linguistics, Nanzan University, June 27, 2015), and 60th General Meeting of English Literature Society of Japan, Hokkaido Branch (Hokkaido University, November 1, 2015). I am grateful for comments and questions I received on these occasions. Discussion with Jun Abe and Hideaki Yamashita has been extremely helpful. Any inadequacies are of course mine. The current work is supported by JSPS KAKENHI Grant Number 24520414.

¹ The strict identity reading, i.e., [e] = 'John's letters,' is also available in (1b). It is generally assumed that for the strict identity reading, [e] is the phonologically empty pronoun *pro*.

(2) manner adverb

John won this way, and Mary did [$_{VP}$ e], too.

(Takahashi 2008a, 404)

[$_{VP}$ e] in (2) is most naturally interpreted as "win this way;" the adjunct *this way* is included in the interpretation of [$_{VP}$ e]. On the other hand, in the Japanese counterpart of (2), the adjunct in the antecedent sentence in (3a) is not necessarily included in the interpretation of the ellipsis site in (3b).

(3) a. Taroo-wa kono hoohoo de katta Taroo-TOP this way in won
'Taroo won (in) this way.'
b. Hanako mo [e] katta Hanako also won
'Hanako also won.' (Takahashi 2008a, 403)

The arguments against the V-stranding VP-ellipsis analysis as shown above, however, does not imply that there is no adjunct ellipsis in Japanese. Rather, an examination of the literature on Japanese ellipsis/deletion reveals that there are cases which easily allow adjunct ellipsis, as well as cases which disfavors adjunct ellipsis. In this paper, I will first make a brief review of some representative examples of ellipsis-resistant adjuncts and those of ellipsis-tolerant adjuncts, and will extract crucial factors that distinguish these two. I will then claim that the notion of (contrastive) focus/de-focus plays a significant role in the adjunct ellipsis paradigm (Section 2). In the second half of the paper (Section 3 and Section 4), I will explore cases of ellipsis-resistant arguments and suggest that it is focus, not an operator-variable relation, that blocks ellipsis of arguments as well.

2. Ellipsis-Resistant Adjuncts, Ellipsis-Tolerant Adjuncts

Kuno (1995) and Kamio and Takami (1998) report series of adjunct ellipsis examples as in (4). I have modified Kamio and Takami's original sentence by changing the locative PP as *zibun-no heya-de* 'self-GEN room-in' to make it clear that it is a real case of ellipsis.²

(4) a.	Ziroo-wa zibun-no heya-de	Hamlet-o	yomi,
	Jiro-TOP self-GEN room-in	Hamlet-ACC	read-and
b.	Taroo-wa [e] Lear Oh-o Taro-Top King Lear-ACC	yonda read	

² Note that if we replace [e] in (4b) with an overt locative proform *soko-de* 'there,' we can only get the strict identity reading, meaning that Taro read *King Lear* in Jiro's room.

'Jiro_i read *Hamlet* in his_i room, and Taro_j read *King Lear* [e].' ([e] can be 'in his_j room') (Cf. Kamio and Takami 1998, 134)

Saito (2007) also observes that locative PPs are eligible for ellipsis.

(5) a.	Taroo-wa	zibun-no	oya-no	ie-ni]	sunde iru
	-TOP	self-GEN	parent-Gen	house-in	live
'Taroo lives in his parents' hou					
b.	Demo, Hana but	ko-wa [e -TOP] sunde inai live-not		

'But Hanako does not live in his/her parents' house.'

Let us next look at (6), a representative case of ellipsis-resistant adjuncts.

(6) a. Ziroo-wa zibun-no burasi-de sono-kuruma-o aratta ga Jiro-TOP self-GEN brush-with the-car-ACC washed but

'Jiroi washed the car with hisi brush, but'

b. Taroo-wa ([e]) sono-kuruma-o araw-anak-atta Taro-TOP the-car-ACC wash-not-PAST

'Taro_j didn't wash the car.' (*[e] = with his_j brush)

The relevant adjunct ellipsis reading is very difficult to get in (6b), in which the adjunct in the antecedent clause is a manner/instrumental PP. Further, locative PPs are not always eligible for ellipsis, either. Compare (5) with (7) below, which is another clear example of ellipsis-resistant adjuncts.

(7) a. Hanako-wa zibun-no oya-no ie-de hiroo-en-o
 Hanako-TOP self-GEN parent-GEN house-in wedding-reception-ACC okonatta ga,
 did but

'Hanako gave her wedding reception at her parent's house, but'

b. Yuko-wa ([e]) hiroo-en-o okonaw-anak-atta Yuko-TOP wedding-reception-ACC do-not-PAST

'Yuko didn't give her wedding reception.' (*[e] = at her parents' house)

One noticeable difference between (5) and (7) is that in (7) among two recoverable constituents in the second clause, one (i.e., at self's parents' house) is elided while the other (i.e., her wedding reception) stays intact. In (5), on the other hand, a recoverable (hence,

syntactically elidable) constituent is just one: at self's parents' house. Based upon similar observations, Kuno (1982) proposes a discourse condition on deletion in (8).

(8) Ban Against Partial Discourse Deletion

If discourse deletion of recoverable constituents is to apply, apply it across the board to nonfocus constituents. Nonfocus constituents which are left behind by partial discourse deletion will be reinterpreted, if possible, as representing contrastive foci.

(Kuno 1982, 84-85)

Given (8), let us consider (7) carefully. The idea here is that the object NP in the second clause in (7) is potentially deletable together with the adjunct (both of which are recoverable in this discourse context), but actually stays intact in the structure. According to (8) then, this leftover NP is reinterpreted as a contrastive focus. Since the predicate in (7b) is negated, the leftover object NP is most naturally interpreted as the focus of negation; (7b) means that Yuko did not have her wedding reception at all. This interpretation contradicts the interpretation which would be obtained most naturally if the locative PP is included in the predicate: Yuko did nit give her wedding reception at her parents' house. This sentence strongly implies that Yuko did give her wedding reception but not at her parents' place. As a result, it is very difficult to get the adjunct ellipsis reading in (7b).

The same applies to manner adverb cases as well. Consider (9) first which is the nonelliptic version of (6) above.

(9) a. Ziroo-wa zibun-no burasi-de sono-kuruma-o aratta ga Jiro-TOP self-GEN brush-with the-car-ACC washed but

'Jiroi washed the car with hisi brush, but'

b. Taroo-wa zibun-no burasi-de sono-kuruma-o arawanakatta Taro-TOP self-GEN brush-with the-car-ACC wash-not-PAST

'Taroj didn't wash the car with hisj bruch.'

The manner adverb and the object in (9b) are identical to those in (9a) and hence they are recoverable in this discourse. If we delete the adjunct alone and retain the object NP, condition (8) applies. The result is as shown in (6) above; it is very difficult to get the adjunct-ellipsis reading. Why is this so? According to condition (8), the leftover NP is reinterpreted as the focus, and thus it is most naturally interpreted as the focus of negation since the verb is negated here too; Taro did not wash the car at all. This interpretation is incompatible with the interpretation we would obtain if the manner adverb is a part of the predicate as shown in (9b); that Taro did wash the car but not with his brush.

If the discussion so far is on the right track, it is predicted that when only the adjunct is a recoverable constituent in a sentence, condition (8) is irrelevant and thus ellipsis of the

adjunct will be possible. This is exactly what we have observed in (4) and (5) above. The same is true for manner adverbs as in (10).

- (10) a. Ziroo-wa zibun-no burasi-de sono-kuruma-o aratta ga Jiro-TOP self-GEN brush-with the-car-ACC washed but
 'Jiro_i washed the car with his_i brush, but'
 - b. Taroo-wa zibun-no burasi-de **kono**-kuruma-o aratta Taro-TOP self-GEN brush-with **this**-car-ACC washed

'Taroj washed this car with hisj brush.'

The object NP *sono-kuruma* 'the-car' in (10a) and the object NP *kono-kuruma* 'this-car' in (10b) are different and contrasted; thus the latter is not recoverable in this context. The only recoverable constituent (aside from the verb) is the manner adjunct 'with self's brush.' The relevant adjunct-ellipsis interpretation is fairly easy to obtain as in (11).

(11) a.	Ziroo-wa zibu	n-no burasi-de	sono-kuruma-o	aratta	ga	
	Jiro-TOP self-	GEN brush-with	the-car-ACC	washed	but	
	'Jiro _i washed the car with his _i brush, but'					
h	Taroo wa [o]	kono kurumo	o aratta			

b. Taroo-wa [e] **kono**-kuruma-o aratta Taro-TOP **this**-car-ACC washed

'Taroj washed this car (with hisj brush).'

A short note on optionality is in order here. As Saito (2007) argues, the locative PP in (5) is an argument of the verb *sundeiru* 'live' and thus the location information is semantically obligatory in (5). One such interpretation is the sloppy identity reading (a hallmark of ellipsis) in (5b).³ On the other hand, for the other ellipsis-tolerant adjunct cases we have examined above, the ellipsis interpretations are optional. For instance, 'with his brush' is not necessarily included in the interpretation of (11b). This optionality is natural since adjuncts by definition are optional elements in a sentence to begin with.

Note in passing, in this regard, that it is clear that Oku's (1998) conception of θ -feature driven analysis of Japanese argument ellipsis is not tenable. Based on Bošković and Takahashi's (1998) idea of the θ -feature driven analysis of Japanese scrambling, Oku proposes an LF copy theory of Japanese argument ellipsis. In this theory, the antecedent argument is copied in LF onto the empty argument slot as a last report to satisfy the θ -feature

³ The other reading, i.e., the strict identity reading, also seems to be possible in (5b). I am not going to discuss in this paper how to get this interpretation, but simply to mention that null pronoun *pro* is employed in such a case, as Saito (2007) suggests. The point here is that in either way, the locative PP must be semantically present in (5b).

requirement of the predicate. This implies that there is no genuine adjunct-ellipsis because adjuncts by definition have nothing to do with θ -feature checking. There is no motivation for LF copy of the "antecedent" adjunct; hence, no adjunct ellipsis. Oku's analysis, however, is off the mark in two respects, one empirical and one theoretical. The empirical problem is, as we have just seen in this section, that there seems to be a good reason to believe that adjunct-ellipsis is possible independently of θ -saturation.

As a theoretical problem, it is not desirable to resort to extra technicalities (such as θ -feature checking) in the phrase structure building mechanism, other than binary merge (setmerge or pair-merge) (Chomsky 2013). In the syntactic computational system, merge recursively applies freely.⁴ The resulting structures may be semantically adequate or inadequate at the conceptual-intentional system. When the predicate has a θ -role to assign, there must be some argument to receive the θ -role at LF; otherwise, the sentence is semantically inadequate.⁵ The relevant argument (θ -role receiver) can be a phonologically empty pronoun *pro* (leading to the strict identity interpretation), as widely assumed in the generative literature since Kuroda (1965). Another possible way to have an unpronounced θ role receiver is that the null argument is provided by LF copy (giving the sloppy identity reading; Oku 1998). Adjuncts do not have to satisfy this kind of argument structure related requirement, and hence adjunct-ellipsis is optional: it is possible under specific information structure conditions but not necessary.

3. More on Ellipsis-Resistance

In this section, we will first consider two instances of ellipsis-resistant constituents: a PP marked with 'toritate-si', a focus particle *-dake* 'only', and a wh-phrase *nani* 'what.' I will then discuss two approaches to the issues of why they are ellipsis-resistant. "Ban against ellipsis of inherently focused constituents" (Oku 2013) and "Ban against ellipsis of a phrase that forms an operator-variable chain" (Saito 2014). Then, I will report that there is a case of QR which creates an operator-variable chain but still allows ellipsis, and suggest that the notion of focus/defocus must be playing a significant role.

Let us first consider (12).

⁴ Under LF copy theory of ellipsis, we have to assume that merge may take an antecedent constituent that is already a part of another structure as an ingredient of the operation. This is a radical departure from the standard assumption of merge operation, and its implications must be explored. At the moment, I just conjecture that a work space for syntactic computation can be slightly larger than the one standardly assumed, so that in addition to "internal" merge and "external" merge (Chomsky 2013), merge taking a constituent in another structure in the computational work space is possible. Note also that (ϕ -)feature agreement plays an important role in the human language phrase structure building mechanism, but it may not be relevant in Japanese phrase structure building, as Saito (2007) argues.

⁵ This can be seen as a minimalist conception of the θ -criterion violation (Chomsky 1981).

(12) John-wa Mary-to-*dake* asob-e-ru John-TOP Mary-with-*only* play-can-PRES
'John can play only with Mary.' (only > can, *can > only)

In (12), *dake* 'only' must take scope over *-e* 'can'. Following Shoji (1986), Funakoshi (2012) argues that the PP *Mary-to-dake* 'only with Mary' is forced to move to a focus position outside VP as shown in (13).

(13) John-TOP [$_{FocP}$ [$_{PP}$ Mary-with-only] [$_{VP}$ t $_{PP}$ t $_{play}$]] play-can

An interesting fact Funakoshi discusses is that PP-ellipsis is not possible with (13), as shown in (14).

(14)	John-wa	Mary-to-dake	asob-e-ru.	*Bill-mo	[e]	asob-e-ru.
	John-TOP	Mary-with-only	play-can-PRES	Bill-also		play-can-PRES

'Lit. John can play only with Mary. Bill can play [e], too.'

Assuming that V also moves out of VP as in (13), Funakoshi argues that VP-ellipsis cannot derive the second clause in (14) since the PP *Mary to dake* 'only with Mary' has moved out of the ellipsis target VP. Now, (14) is unacceptable with the relevant ellipsis interpretation, and then Funakoshi argues that his VP-ellipsis analysis gives an explanation of the fact while PP-ellipsis analysis cannot.

As Oku (2013) points out, however, the fact that (14) does not have the relevant PPellipsis interpretation does not necessarily mean that PP-ellipsis is unavailable in Japanese syntax. Notice that the PP *Mary-to-dake* 'only with Mary' appears in the Spec of FocP and thus it is structurally rendered as focus. However, ellipsis/deletion presupposes the defocusing of the target constituent (Tancredi 1992, for instance). The focused PP in Spec of FocP conflicts with the defocusing requirement for ellipsis. Hence, it turns out to be an ellipsis-resistant constituent.

Wh-phrase arguments are also an instance of ellipsis-resistant constituent (Sugisaki 2012, Ikawa 2013, Saito 2014). Oku (2013) discusses that *wh*-phrases are ellipsis-resistant because they are inherently focused and thus does not satisfy the defocusing requirement, a prerequisite for ellipsis. Consider (15).

(15) a.	John-wa	nani-o	tabeta	no?	
	Joh-TOP	what-ACC	ate	Q	
	'What did J	ohn eat?'			
b.	Bill-wa	[e]	tabeta	no?	

ate

Bill-TOP

Q

"*What did Bill eat?" Possible only with 'Did Bill eat something?"

Oku argues that it is natural to assume that *nani-o* 'what-ACC', or *wh*-phrases in general, in an interrogative question is interpreted as focus. For example, (15a) is uttered most naturally when the speaker presupposes that John ate something, and asking for the identity of that 'something.' In more formal terms, the *wh*-portion is a focus-operator and the rest of the sentence is the presupposition.

(16) [for which x, x a thing] [John ate x] Focus Presupposition

Given that *wh*-phrases in a wh-question are inherently the focus of the sentence in this sense, it is not surprising that they are ellipsis-resistant.

Saito (2014), on the other hand, proposes a different approach to this type of ellipsisresistant cases. Look at the LF representation in (16) again. The *wh*-phrase constitutes an operator-variable chain. Assuming that a chain is not eligible for LF copy, Saito argues that, having (15a) as the antecedent, what we can get by LF copy for (15b) is either (17a) (only the operator portion is copied) or (17b) (only the variable portion is copied).

(17) a. [for which x, x a thing] Bill-wa tabeta no -TOP ate Q

b. Bill-wa x tabeta no -TOP ate Q

(17a) is an illegitimate LF representation because it contains a vacuous quantification; the operator has no variable to bind. (17b) is not interpretable properly either because it contains an unbound variable. Under the LF copy analysis of argument ellipsis, therefore, it is not possible to reconstruct the elliptic slot to be properly interpretable. The same applies to Funakoshi's case in (14) above as well, Saito argues. The focus phrase movement to Spec of FocP creates an operator-variable chain in (13). Hence, the focus phrase cannot be the appropriate antecedent to fill in the elliptic slot in the second clause in (14). The PP ellipsis is not possible there.

The ellipsis-resistant arguments we have examined in this section so far can be accounted for in either of the two ways. They are ellipsis-resistant either because they must be interpreted as focus in Spec of FocP or in Spec of CP, or because their antecedent forms an operator-variable chain. Then, the real test case is a sentence in which the candidate antecedent forms an operator-variable chain but does not function as focus. Saito (2014) discusses such cases, while there seems to be cases in which QR applies but ellipsis is still possible. Let us first look at Saito's argument. As Goro (2007) shows, Japanese disjunctive phrases with ka 'or' always take scope over negation as in (18a), and thus the LF representation is (18b).

(18) a. Taroo-wa supeingo ka furansugo-o hanasanai.

Taroo-TOP Spanish or French-ACC speak.not.PRES

'Taroo doesn't speak both Spanish and French.' (or > not)

b. $[\exists x: x = Spanish \text{ or } x = French]$ Taroo does not speak x.

(Saito 2014, 23)

Now, as Funakoshi (2013) reports, the second clause in (19) cannot have the expected "or > not" interpretation.

(19) Hanako-wa supeingo ka huransugo-o hanasu ga, Taroo-wa [e] hanasanai. Hanako-TOP Spanish or French-ACC speaks though Taroo-TOP speak.not.PRES

'Although Hanako speaks Spanish or French, Taro does not speak.'

The second clause in (19) can only mean that Taro speaks neither; "not > or" interpretation. For the "or > not" interpretation, the antecedent clause has an operator-variable form for the object NP as in (18b). Given that an operator-variable is ellipsis-resistant, it follows, under the LF copy theory of ellipsis, that (19) does not have the relevant "or > not" scope interpretation. Unless we have reasonable evidence to claim that the disjunctive object NP in question ('Spanish or French') is focus, the fact in (19) cannot be accounted for by Oku's theory, and favors Saito's analysis. There is, however, one type of scope example in which the object quantifier raising (QR) over the subject is necessary but ellipsis is still possible. Let us next consider such a case below.

Reinhart (2006) argues that QR is necessary as an interface repair strategy to obtain the inverse scope interpretation as in (20).

(20) A doctor will examine every patient.

(20) is ambiguous in scope, and QR of the universally quantified object over the existentially quantified subject is necessary to get the " $\forall > \exists$ " interpretation as shown in (21).

(21) [every patient]_i [a doctor will examine t_i]

Reinhart, following Fox (2000), claims that QR is a costly operation and thus possible only when its application gives rise to a new interpretation which would not be obtained otherwise.⁶

How about Japanese in this regard? It has been claimed that Japanese is a "scope rigid" language (Lasnik and Saito 1992, for instance) and that it is not easy to get inverse scope interpretations. Interestingly, however, as Oku (2008) discusses, there are cases in which

⁶ "... there are cases of genuine scope-shift, for which we still need QR." (Reinhart 2006, 102).

inverse scope interpretations are not only easily obtainable, but rather strongly favored even in Japanese. Consider (22).

- (22) a. TA-ga hitori dono CALL kyoositu-ni-mo taiki-simasu TA-NOM one every CALL room-at-also wait and watch 'A TA waits and watches in every CALL room.'
 - b. Keikan-ga hitori dono iriguti-ni-mo haritui-te-imasu police officer-NOM one every gate-to-also guard-PROG-PRES

'A police officer is guarding every gate.'

Oku argues, *a la* Reinhart, that QR of a universally quantified NP/PP over an existentially quantified subject NP is not just possible, but rather necessary in cases like (22), in which the surface order scope interpretation is pragmatically odd and QR gives a pragmatically natural inverse scope interpretation. Therefore, the LF representations for the intended inverse scope reading for (22a) and (22b) are (23a) and (23b), respectively.

- (23) a. $[\forall x: x \text{ a CALL room}] [\exists y: y \text{ a TA}] [y waits and watches at x]$
 - b. $[\forall x: x \text{ a gate}] [\exists y: y \text{ a police officer}] [y \text{ is guarding } x]$

Now, let us examine if ellipsis of the universally quantified PP/NP is possible.

- (24) a. Gozentuu-wa TA-ga hitori dono CALL kyoositu-ni-mo taiki-simasu morning-TOP TA-TOP one every CALL room-at-also wait and watch 'In the morning, a TA waits and watches in every CALL room.'
 - b. Gogo-wa RA-ga hitori [e] taiki-simasu afternoon-TOP RA-TOP one wait and watch

'Lit. In the afternoon, an RA waits and watches [e].'

(25) a. A-too-de-wa keikan-ga hitori dono iriguti-ni-mo A-building-at-TOP police officer-NOM one every gate-to-also haritui-te-imasu guard-PROG-PRES

'At building A, a police officer is guarding every gate.'

b. B-too-de-wa keibiin-ga hitori [e] haritui-te-imasu B-building-at-TOP security guard-NOM one guard-PROG-PRES

'Lit. At building B, a security guard is guarding [e].'

As far as I can see, it is natural to have the inverse scope interpretation in (24b) and (25b). If this is true, we have two serious questions to be explored. One is how the inverse scope reading is derived in (24b) and (25b) under the LF copy theory of ellipsis. The other is what makes the difference between (24b)/(25b) (which allow ellipsis) and (19) (which does not allow ellipsis). I will discuss the first question first, and will give a very tentative speculation on the second.

4. Discussion

Let us recapitulate Saito's (2014) argument for the claim that a constituent which forms an operator-variable chain cannot serve as the antecedent of ellipsis. Assuming the LF copy analysis of ellipsis, a chain itself cannot be copied. Then, if the variable portion of the chain is copied, it turns out to be an unbound variable at the ellipsis site. If the operator portion of the chain is copied, it binds nothing in the ellipsis clause (vacuous quantification). Neither is a legitimate LF object to be interpreted. Ellipsis is not possible in such cases.

However, there is another possible derivational path worth examining; namely, the antecedent is copied before the operator-variable formation. Consider the following parallel derivation of the antecedent and the ellipsis clauses as illustrated in (26).



After QP and V are merged to make a VP (and crucially, *before* any further merger applies) in the antecedent clause, LF copy applies to copy the QP in the antecedent clause and merges it with V in the ellipsis clause as in (26b). Then, a subject NP merges to both clauses and then QR applies in a parallel fashion in both clauses as shown in (26d).⁷ Note that in the current minimalist model of syntactic computation, there is no "LF component" in the sense of Chomsky (1981). Thus, there is no counter-cyclicity here. "LF copy" here means an operation which copies the antecedent void of phonetic features and merges it to the verb in the ellipsis clause.⁸ Every step in the derivation is in a bottom up fashion. If this is a possible derivational course, as it seems to be, we can derive the legitimate LF representations for (24b) and (25b).

⁷ I have put aside functional categories irrelevant to the discussion here, just for expository purposes.

⁸ This can be assumed to be the same as QR as a syntactic movement void of phonetic features.

I claim that the same derivation applies to the *wh*-phrase cases and to Funakoshi's focus phrase case we discussed above. The scope taking constituent in question is copied, void of phonetic features, onto the ellipsis clause, and then the further merger and movement (internal merge) apply in parallel. A *Wh*-phrase and an NP-*to-dake* 'NP-with-only' phrase must be interpreted at the focus position (Spec of CP[+Q] and Spec of FocP) due to their intrinsic property, and hence are resistant to ellipsis which requires defocusing as a precondition. Universally quantified QPs as in (24) and (25), on the other hand, are not intrinsically focus carrying elements. Although they undergo QR for scope, the landing site is not a focus position in the relevant sense and thus they are not resistant to ellipsis.

Finally, the disjunctive phrase (NP ka NP 'NP or NP') we discussed in (19) appears to be problematic in the current analysis. A possible direction is to investigate if the disjunctive phrase in Japanese is a kind of focus carrying element in the same sense as a *wh*-phrase and an NP-to-dake phrase. One noticeable difference between the disjunctive phrase and the universally quantified phrase is that the movement in question is *syntactically* forced in the former but not in the latter. Let us compare (18a) and (22a) again, repeated here as (27) and (28) respectively.

- (27) Taroo-wa supeingo ka furansugo-o hanasanai. Taroo-TOP Spanish or French-ACC speak.not.PRES'Taroo doesn't speak both Spanish and French.' (or > not)
- (28) TA-ga hitori dono CALL kyoositu-ni-mo taiki-simasu TA-NOM one every CALL room-at-also wait and watch
 - 'A TA waits and watches in every CALL room.'

The scope interpretation without the disjunctive phrase movement over Neg *not* (i.e., "not > or" reading) would give an interpretation which has nothing wrong pragmatically; our world can be one in which Taro speaks neither of the two languages. Nevertheless, the disjunctive phrase has to move, to make the "or > not" an only possible interpretation of (27). Hence, the movement is motivated for some syntactic reason, not for an interpretive reason. It is then natural to assume that the disjunctive phrase must have some feature to be checked with a relevant functional head which appears above Neg *not* structurally. In classis terminology, the movement is a "substitution" to the Spec of the functional head. As for the universally quantified phrase in (28), on the other hand, the motivation for QR is purely pragmatic.⁹ The surface scope " \exists > \forall " interpretation is just pragmatically odd, and thus the driving force for this QR is not syntactic. There is nothing syntactically wrong with the LF representation which corresponds to the surface scope interpretation without QR over the subject. The

⁹ See Reinhart (2006) for detailed discussion of QR as a pragmatically motivated repair strategy at syntax-LF interface.

interpretation is simply strange in the light of our current knowledge of the world.¹⁰ In other words, there is nothing intrinsic in a universally quantified phrase which makes QR over the subject necessary, and in fact there are many cases in which a universally quantified phrase stays under the scope of the subject as in (29); $\exists > \forall$ is the most natural interpretation here.

(29)	TA-ga	hitori	dono CALL kyoositu-ni-mo	sezyoo-sita
	TA-NOM	one	every CALL room-to-also	lock-did

'A TA locked every CALL room.'

It is natural then to assume that there is no specific syntactic feature which induces QR over the subject. Put it again in a classic term, the movement is an instance of "adjunction." I take this difference between the disjunctive phrase and the universally quantified phrase is crucial. Although both create an operator-variable chain, the former is ellipsis-resistant whereas the latter is not. My tentative suggestion is the following: just as *wh*-phrase movement is obligatory because of the intrinsic feature of the phrase and the relevant functional head, C[+Q], is necessary to attract the phrase, the disjunctive phrase must have the relevant functional head to attract the phrase. The phrase appears in the Spec of the functional head, which makes the phrase ellipsis-resistant.

5. Summary

In this paper, I first discussed that there are cases of ellipsis-resistant adjuncts and ellipsis-tolerant adjuncts, and claimed that the former can be accounted for by Kuno's (1982) discourse condition (8) and that LF copy of adjuncts is a possible operation in principle in Japanese syntax. Typical examples in the literature against adjunct ellipsis do not make an argument for the claim that there is no adjunct ellipsis, but rather, they can be explained by discourse conditions, by carefully taking focus/defocus effect into consideration. In the second half of the paper, I discussed cases of ellipsis-resistant arguments. Specifically, I showed that universally quantified NPs/PPs taking scope over the subject are eligible for ellipsis and suggested that it may not be an operator-variable chain *per se* that makes the element ellipsis-resistant, but rather that what seems to block argument ellipsis is the fact that the argument is forced to move to a specific type of Specifier position, arguably a "focus" position in the structure.

References

Bošković, Ž and D. Takahashi (1998) "Scrambling and Last Resort," *Linguistic Inquiry* 29, 347-366. Chomsky, N. (1981) *Lectures on Government and Binding*. Foris, Dordrecht.

¹⁰ The surface scope interpretation of (28) can be pragmatically natural in some other world, such as in a science fiction scenario in which a person can divide himself/herself into several persons to perform different tasks at the same time.

Chomsky, N. (2013) "Problems of Projection," Lingua 130, 33-49.

- Fox, D. (2000) Economy and Semantic Interpretation. The MIT Press, Cambridge, Mass.
- Goro, T. (2007) *Language-Specific Constraints on Scope Interpretation in First Language Acquisition*, Ph.D. dissertation, University of Maryland.
- Ikawa, H. (2012) "What the Ineligibility of *Wh*-phrases for Argument Ellipsis Tells Us: On the Inertness of Phonetically Null Elements," Online *Proceedings of GLOW in Asia 2012*.
- Kamio, A. and K. Takami (1998) *Danwa to Zyoohoo Koozoo [Discourse and Information Structure]*. Kenkyusha, Tokyo.
- Kuno, S. (1982) "Principles of Discourse Deletion Case Studies from English, Russian and Japanese," *Journal of Semantics* 1 (1), 61-93.
- Kuno, S. (1995) "Null Elements in Parallel Structures in Japanese." In R. Mazuka, and N. Nagai eds., Japanese Sentence Processing, Lawrence Erlbaum Associates, 209-233.
- Kuroda, S.-Y. (1965) *Generative Grammatical Studies in the Japanese Language*, Ph.D. dissertation, MIT.
- Lasnik, H. and M. Saito (1992) Move α: Conditions on Its Application and Output. The MIT Press, Cambridge, Mass.
- Oku, S. (1998) *A Theory of Selection and Reconstruction in the Minimalist Perspective*, Ph.D. dissertation, University of Connecticut.
- Oku, S. (2008) "Toogo, Zyoohoo Koozoo, Ippan Nintiryoku [Syntax, Information Structure, General Cognition]." In N. Hasegawa ed. Toogoron-no Sintenkai to Nihongo Kenkyuu: Meidai-o Koete [A New Development of Syntax and Studies of the Japanese Language: Beyond Propositions], Kaitakusha, Tokyo, 227-267.
- Oku, S. (2013) "Japanese Ellipsis Revisited: Defocusing, Remnants, and Adjuncts," presented at 31st General Meeting of English Linguistics Society of Japan (November 9, 2013), Fukuoka University.
- Otani, K. and J. Whitman (1991) "V-Raising and VP-Ellipsis," Linguistic Inquiry 22, 345-358.
- Reinhart, T. (2006) Interface Strategies Optimal and Costly Computations. The MIT Press, Cambridge, Mass.
- Saito, M. (2007) "Notes on East Asian Argument Ellipsis," Language Research 43, 203-227.
- Saito, M. (2014) "Ellipsis." ms. Nanzan University. [To appear in *Handbook of Japanese Syntax*, eds.M. Shibatani, S. Miyagawa and H. Noda, Mouton de Gruyter, Berlin].
- Shoji, A. (1986) Dake and Sika in Japanese: Syntax, Semantics and Pragmatics, Ph.D. dissertation, Cornell University, Ithaca, NY.
- Sugisaki, K. (2013) "Argument Ellipsis in Acquisiton," Nanzan Linguistics 9, 147-171.
- Takahashi, D. (2008a) "Noun Phrase Ellipsis." In S. Miyagawa and M. Saito eds., *The Oxford Handbook of Japanese Linguistics*, Oxford University Press, Oxford, 394-422.
- Takahashi, D. (2008b) "Quantificational Null Objects and Argument Ellipsis," *Linguistic Inquiry* 39, 307-326.
- Tancredi, C. (1992) Deletion, Deaccenting, and Presupposition, Ph.D. dissertation, MIT.